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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,470	03/25/2004	Steven M. Hansen	AD7006USNA	8340

23906 7590 02/15/2005

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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WILMINGTON, DE 19805

EXAMINER

RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4)

Office Action Summary	Application No. 10/809,470	Applicant(s) HANSEN ET AL.	
	Examiner Umakant K. Rajguru	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 14-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 30-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-13 & 30-32, drawn to a composition and article/s, classified in class 524, subclass 495.
- II. Claims 14-29, drawn to a process for making composition, classified in class 524, subclass 700.

The inventions are distinct, each from the other because:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as by uniform blending.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

2. During a telephone conversation with Attorney Craig H. Evans on November 22, 2004 a provisional election was made with traverse to prosecute the invention of I, claims 1-13 and 30-32. Affirmation of this election must be made by applicant in

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replying to this Office action. Claims 14-29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

WR Attorney Evans ^{also} elected (a) aromatic polyamides (of instant claim 8) and (b) carbon microfibers (of instant claim 10).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3 & 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 4716062).

Klein discloses composite material comprising reinforcement elements surrounded by a matrix (abstract). Matrix included polyester (col. 4, line 48).

Reinforcement includes fibers such as Kevlar fibers (col. 5 line 26). Microfibers can be

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organic such as those of polyethylene terephthalate (table 1, component B2, overlapping col. 13 & 14). They can be inorganic such as those of glass (table 1, component B3).

Klein does not suggest using precisely the claimed amounts of microfiber. Klein uses 30-90% of reinforcement (col. 4, line 68). From the examples, about 65% of this reinforcement is of fibers. This means Klein suggests using about 20 to 60% of fibers. It is within the expertise of one of skill in the art to reduce the (disclosed) amount of 20% to the (claimed) amount of 15% to reduce cost and to increase uniform dispersion of fibers in the matrix. Therefore it would have been obvious to follow teachings of Klein and arrive at above invention.

5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (US 4716062) as applied to claim 1 above, and further in view of Guzauskas (US 643037).

Klein does not mention titanium dioxide and tougheners.

Guzauskas discloses compositions (similar to that of Klein) containing tougheners, coloring pigments (col. 7, line 25; col. 16, lines 52 & 59) and titanium dioxide.

It would have been obvious to include in the composition of Klein (a) tougheners to increase mechanical strength and (b) titanium dioxide for opacity and white color.

6. Claims 1-3 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amarasekera et al (US 6689835).

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Amarasekera discloses composition comprising polymeric resin and small carbon fibers (abstract). Polyethylene terephthalate is a suitable resin (col. 2, line 28). Microfibers are suitable fillers (col. 4, line 31). The fibers can be organic (col. 4, line 60 to col. 5, line 7) or inorganic (col. 5, lines 8-22). Glass fibers are used for reinforcement upto about 50% by wt (col. 6, lines 6-10). Fibrous filler is used at upto 50% by wt (col. 5, lines 23-26).

Amarasekera does not teach using precisely the (claimed) amounts of fibers. As in the case of Klein, it would be obvious to change these amounts for enhancing mechanical strength. Hence it would have been obvious to follow teachings patentee and arrive at claimed invention.

7. Claims 12-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Amarasekera et al (US 6689835) as applied to claim 1 above, and further in view of Gzauskas (US 6433037).

Amarasekera does not mention titanium dioxide and tougheners.

Disclosure of Gzauskas is set forth in item 5 above.

It would have been obvious to include in the composition of Amarasekera, (a) titanium dioxide and (b) tougheners to impart opacity, white color as well as to increase mechanical strength.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to U. K. Rajguru whose telephone number is (571) 272-1077. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.

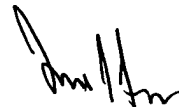
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



U. K. Rajguru/af
February 9, 2005



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700